

General Description

FRONT SUSPENSION

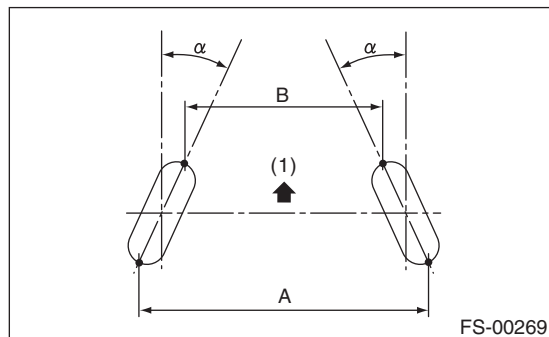
1. General Description

A: SPECIFICATION

Model			All models
Front	Wheel arch height (Tolerance: $+12\text{ mm}$ -24 mm ($+0.47\text{ in}$ -0.94 in))		445 (17.5)
	Camber (Tolerance: $\pm 0^\circ 45'$ Differences between RH and LH: $45'$ or less)		$0^\circ 00'$
	Caster (Referential Value)		$5^\circ 25'$
	Steering angle (Tolerance: $\pm 1.5^\circ$)	Inner wheel	38.3°
		Outer wheel	33.8°
	Toe-in mm (in)		0 ± 3 (0 ± 0.12) Toe angle (sum of both wheels): $0^\circ \pm 0^\circ 15'$
Rear	Wheel arch height (Tolerance: $+12\text{ mm}$ -24 mm ($+0.47\text{ in}$ -0.94 in))		448 (17.6)
	Camber (Tolerance: $\pm 0^\circ 45'$ Differences between RH and LH: $45'$ or less)		$0^\circ 00'$
	Toe-in mm (in)		0 ± 3 (0 ± 0.12) Toe angle (sum of both wheels): $0^\circ \pm 0^\circ 15'$
	Thrust angle (Tolerance: $\pm 0^\circ 30'$)		0°

NOTE:

- Front and rear toe-in and front camber can be adjusted. Adjust if the toe-in or camber tolerance exceeds specifications.
- Other items indicated in the specifications is not equipped with adjustment mechanisms. If other items exceed specifications, check the suspension parts and connections for deformation, and replace with new parts as required.



(1) Front

$A - B$ = Positive: Toe-in, Negative: Toe-out

α = Individual toe angles

[illegible]

General Description

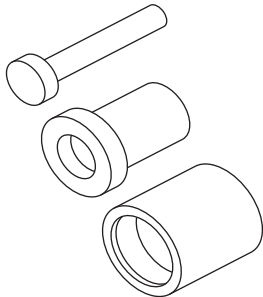
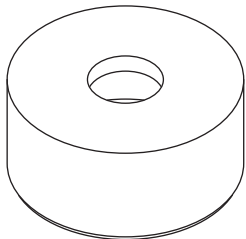
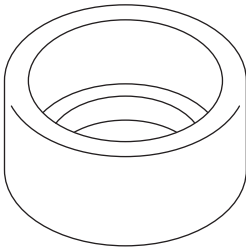
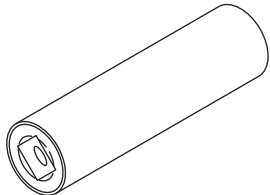
FRONT SUSPENSION

		<i>Tightening torque:N·m (kgf-m, ft-lb)</i>
(1) Front crossmember	(15) Jack-up plate	T1: 7.5 (0.76, 5.5)
(2) Housing	(16) Dust seal	T2: 20 (2.0, 14.5)
(3) Ball joint	(17) Strut mount	T3: 25 (2.5, 18.4)
(4) Front arm	(18) Upper spring seat	T4: 39 (4.0, 28.8)
(5) Support plate	(19) Dust cover	T5: 45 (4.6, 33.2)
(6) Rear bushing	(20) Helper	T6: 50 (5.1, 36.9)
(7) Front bushing	(21) Coil spring	T7: 55 (5.6, 40.6)
(8) Stud bolt	(22) Strut	T8: 60 (6.1, 44.3)
(9) Stabilizer link	(23) Adjusting bolt	T9: 95 (9.7, 70.1)
(10) Bracket	(24) Castle nut	T10: 110 (11.2, 81.1)
(11) Bushing	(25) Self-locking nut	T11: 150 (15.3, 110.6)
(12) Stabilizer	(26) Cotter pin	T12: 155 (15.8, 114.3)
(13) Crossmember support plate (Large type)	(27) Stopper	
(14) Crossmember support plate (Small type)	(28) Front vehicle height sensor (models with auto headlight beam leveler only)	

C: CAUTION

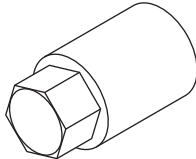
- Wear appropriate work clothing, including a cap, protective goggles and protective shoes when performing any work.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly and replacement.
- Use SUBARU genuine grease etc. or equivalent. Do not mix grease etc. of different grades or manufacturers.
- Before securing a part on a vise, place cushioning material such as wood blocks, aluminum plate, or cloth between the part and the vise.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or rigid racks at the specified points.

D: PREPARATION TOOL**1. SPECIAL TOOL**

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST-927680000	927680000	INSTALLER & REMOVER SET	Used for replacing front arm front bushing.
 ST20299AG000	20299AG000	REMOVER	- Used for replacing front arm rear bushing. - Used together with BASE (20999AG010).
 ST20299AG010	20299AG010	BASE	- Used for replacing front arm rear bushing. - Used together with REMOVER (20999AG000).
 ST20299AG020	20299AG020	STUD BOLT SOCKET	Used for removing and installing the stud bolt for front arm installing portion.

General Description

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ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST20399AG000	20399AG000	STRUT MOUNT SOCKET	Used for disassembling and assembling strut mount.

2. GENERAL TOOL

TOOL NAME	REMARKS
Alignment gauge	Used for measuring wheel alignment.
Alignment gauge adapter	Used for measuring wheel alignment.
Turning radius gauge	Used for measuring wheel alignment.
Toe-in gauge	Used for toe-in measurement.
Dial gauge	Used for damper strut measurement.
Coil spring compressor	Used for strut assembly/disassembly.
Side slip tester	Used for measuring side slip

2. Wheel Alignment

A: INSPECTION

Check the following items before performing the wheel alignment measurement.

- Tire inflation pressure
- Uneven wear of RH and LH tires, or difference of sizes
- Tire runout
- Excessive play and wear of ball joint
- Excessive play and wear of tie-rod end
- Excessive play of wheel bearing
- Right and left wheel base imbalance
- Deformation and excessive play of steering link
- Deformation and excessive play of suspension parts

Check, adjust and measure the wheel alignment in accordance with the procedures indicated in the figure.

